The Terminal Disclaimer is being submitted in order to facilitate proceedings in the above-identified application, so as to achieve earliest possible issuance of a U.S. patent based thereon. It is respectfully submitted that the filing of the Terminal Disclaimer does not constitute agreement with, or an admission as to the propriety of, the provisional obviousness-type double patenting rejection; and does not constitute agreement with, or an admission as to the propriety of, arguments made by the Examiner in connection with this provisional obviousness-type double patenting rejection.

Applicants respectfully submit that with the filing of the Terminal Disclaimer, and since there are no other rejections of claims 1-6, claims 1-6 are clearly allowable.

It is respectfully submitted that the other claims in the application, claims 7 and 8, patentably distinguish over the teachings of the references applied by the Examiner in rejecting claim 7 and 8 in the Office Action mailed December 22, 2004, that is, the teachings of the U.S. Patents to Childress, No. 5,862,975, and to Thomas, et al., No. 5,460,317, International (PCT) Publication No. WO95/26254 (Midling), and the publications The 2nd International Forum on Aluminum Ships (November 1995), Dawes, "An Introduction to Friction Stir Welding and its Development", in Welding & Metal Fabrication (January 1995), pages 13-16, and Bulletin 6 of the TWI-World Centre for Materials Joining Technology, vol. 36, (November/December 1995), pages 124-127, under the provisions of 35 USC §102 and 35 USC §103.

It is respectfully submitted that these references as applied by the Examiner

would have neither taught nor would have suggested such a structure body, or such a vehicle, as in the present claims, having first and second plates welded from one side, at a welding portion, in a thickness direction, by friction stir welding, a raised portion being connected to the welding portion at the one side and projecting to the one side of the first plate, and with a face of the side opposed to the one side being arranged as an outer face of the structure body or of the vehicle. See claims 7 and 8.

By having the face of the structure, opposite to the face upon which the friction stir welding is performed, being the outer (e.g., exposed) face of the structure body or vehicle, a body having an exposed surface which is flat and has a good appearance, yet forming part of a body having a strong weld, can be achieved.

In addition, according to the present invention, with the raised portion connected to the welding portion and projecting to the one side of the first plate (that is, being at the one side at which welding takes place), this side being, e.g., an inner face of the structure body (vehicle), there is no need to machine or grind off the raised portion while still achieving a pleasing appearance of the face arranged as the outer face of the structure body (vehicle).

Midling discloses a method of friction stir welding based on a relative rubbing movement between a probe of harder material and members to be joined, the friction stir welding utilizing a non-consumable probe that is provided with a concave bottom part and an interchangeable pin having a surface of threaded configuration. The welded product is displayed schematically in Figs. 5a-e, which show different types of welds provided by the method and probes. Note also the paragraph

bridging pages 5 and 6 of Midling.

It is respectfully submitted that in connection with the welded structures shown by Midling, no indication is made as to outer and inner faces. It is respectfully submitted that Midling would have neither disclosed nor would have suggested such structure body or such vehicle as in the present claims, wherein the face of the side opposed to the one side at which the friction stir welding takes place, is arranged as an outer face of the structure body or vehicle.

The contention by the Examiner in the second paragraph on page 3 of the Office Action mailed December 22, 2004, that the outer face of the structure body is relative to the direction in which the body is being viewed and does not structurally limit the article, is respectfully traversed. It is respectfully submitted that such outer face has a definite meaning in the art, as being opposite an inner face and being, e.g., located (exposed) to the outside, and it is respectfully submitted that the outer face does structurally limit the article.

The Examiner has taken a same position with respect to each of the other applied references; that is, that the outer face of the structural body is relative to the direction in which the body is being viewed and does not structurally limit the article. To the contrary, it is respectfully submitted that the outer face has a structural meaning; and as will be shown in the following, it is respectfully submitted that none of the remaining applied references would have taught or would have suggested such outer face being the face opposed to that from which the friction stir welding takes place, and advantages thereof.

In addition, it is respectfully submitted that these applied references would

have neither disclosed nor would have suggested such raised portion connected to the welding portion as in claims 7 and 8.

Thomas, et al. discloses a friction stir welding for joining two workpieces or for operating on a workpiece. Welded structure is shown in, e.g., Fig. 1, wherein a pair of aluminum alloy plates 1A, 1B are butted together about a joint line 2. See column 3, lines 62 and 63. Note also the paragraph bridging columns 1 and 2; and column 2, lines 10-13, 23-25, and 34-43, of Thomas, et al. This patent discloses various examples, and states that in all of the examples, the result of the welding operation is an extremely smooth finish on the surfaces of the plates which is a particular advantage of the process. See column 9, lines 21-25.

As seen in Fig. 1 of Thomas, et al., the weld is shown, without an indication as to the body (e.g., a vehicle) formed using the welded structure, and clearly without showing an inner or outer face of the structure body (vehicle). Moreover, from the welded structure shown in Fig. 1, there appears to be a depression at the welded portion. It is respectfully submitted that the disclosure of this reference would have taught away from the present claims, including the raised portion connected to the welding portion as in the present claims, and the outer face with respect to the side subjected to introduction of the friction stir welding tool.

The 2nd International Forum on Aluminum Ships discloses, in Fig. 4, a general view of a friction stir weld in 5083 alloy, describing that the joint quality is excellent and the "weld" is difficult to differentiate from parent material, even after prolonged etching.

This Fig. 4 is a general view of the weld, and it is respectfully submitted that

the disclosure in connection therewith would have neither described nor would have suggested the presently claimed structure body or vehicle, having the specified face arranged as the outer face of the structure body (vehicle), and advantages thereof; and/or the raised portion as in the present claims.

The article from Welding & Metal Fabrication describes friction stir welding; and, in Fig. 1, shows two extruded, 6000 series, aluminum alloy panels autogenously friction stir welded together with very low distortion.

Childress shows a structural double-lap shear joint for attaching fiber-reinforced composite structures, especially graphite/epoxy laminates, to metal structures using metal Z-pins that extend through the composite structure and that are welded to the metal, the structural double-lap shear joint joining two metal tangs sandwiching the composite with a plurality of metal Z-pins that extend through the composite and that are welded to the tangs using resistance, laser, friction stir or another suitable welding process. See column 1, lines 6-10 and column 2, lines 39-43. Note also the paragraph bridging columns 2 and 3.

Bulletin 6 introduces the basic principal of friction stir welding, pointing out the practical advantages and disadvantages. This article discloses that the weld comprises a continuous consolidated nugget of forged material with a much refined grain size; and that the elliptical rings in the weld metal, seen in Fig. 3 of the article, are a product of the welding tool profile and forward movement per revolution in relation to the temperature gradient throughout the depth of the weld. Note also Fig. 2, showing schematically a perspective view of the welded structure; compare with Fig. 1 of Thomas, et al.

It is respectfully submitted that the article from the Welding & Metal Fabrication, Childress and the article in Bulletin 6 provide general views of the formed weld; and it is respectfully submitted that these references do not disclose, nor would have suggested, specifics of structural bodies formed, including wherein the face of the side opposed to the one side from which friction stir welding is performed, is arranged as an outer face of the structure body (vehicle), and advantages thereof; and/or the raised portion connected to the welding portion at the one side and projecting to the one side of the first plate, and various advantages achieved thereby.

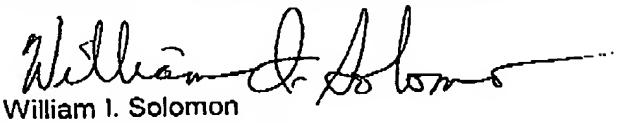
In view of the foregoing comments and enclosed Terminal Disclaimer, reconsideration and allowance of all claims presently in the application are respectfully requested.

To the extent necessary, Applicants petition for an extension of time under 37 CFR § 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to the Deposit Account No. 01-2135

(Case No. 503.35255V12) and please credit any excess fees to such Deposit Account.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP



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